

ISLAND FOX RECOVERY RECOMMENDATION

FROM THE CHANNEL ISLAND FOX RECOVERY COORDINATION GROUP

TECHNICAL ANALYSIS REQUEST TITLE AND NUMBER IDENTIFICATION

Technical Analysis 4.1: Analyze efficacy of golden eagle control and capture methods utilized to date and recommend innovative program for removal methods, taking into account the most up-to-date information on the status of the wild fox populations

*Relates to: Santa Rosa Island, Santa Cruz Island, San Miguel Island
Technical Expertise Group involved: GE, WP¹*

DATE: 7 January 2004

EXECUTIVE SUMMARY

The RCG thanks Task Force 5 for its extensive review of golden eagle control and capture methods and commends this document as an important reference in its own right. We do not repeat in this document, other than in summary, the factual findings of Task Force 5 in Technical Analysis 4.1. When considering all known factors affecting island fox survival, the RCG concludes that any residence of golden eagles on any of the northern islands is incompatible with the recovery and long-term survival of fox populations and seriously compromises releasing captive foxes to the wild. Additional methods for the capture of golden eagles should be tested as soon as possible to determine if they can accelerate the rate of eagle removal from the islands. We also urge that the widest possible net be cast to discover additional means of capturing golden eagles or suppressing their ability to prey upon foxes. Further analyses of eagle food habits are called for to determine the relative function of different prey items in supporting the island eagle population. Lastly, an analysis of the genetics of golden eagles captured on the islands should be conducted as soon as possible to determine, if possible, if the island population is based on a single or multiple founder events; this determination will be helpful in estimating the risk of reinvasion should the present population be successfully eliminated. At this time it is unknown whether recently introduced bald eagles will play a role in inhibiting the island golden eagle population.

BACKGROUND

There are no historic records of golden eagles breeding on the northern Channel Islands, and island foxes are naive to aerial predation. Shortly after it was established that recently established golden eagles were the cause of the rapidly declining fox populations on the northern Channel Island in the late 1990s, the National Park Service initiated a program—conducted by the Santa Cruz Predatory Bird Research Group—to capture eagles and translocate them. From 1999 through June 2004, 37 golden eagles were removed from Santa Cruz Island (35) and Santa Rosa Island (2), using a variety of techniques. The cost for this effort over the period has been approximately one million dollars. During this time, however, one or more breeding

¹ Golden Eagle Management, Island Fox Wild Population Management

pairs of eagles has remained uncaptured, and successful reproduction has continued. Eagles continue to prey on the remaining wild population on Santa Cruz Island, as well as on foxes released from captivity on Santa Rosa Island.

The best evidence suggests that golden eagles are primarily supported by feral pigs remaining on Santa Cruz Island and the remains of deer and elk on Santa Rosa Island. Forthcoming efforts to eradicate pigs on Santa Cruz Island may lead to a carrion supply in the short term, while the absence of pig prey may increase pressure on the remaining wild foxes.

RECOMMENDATIONS

Recommendation 1: Follow a written golden eagle control plan for 2005. Given the great complexity of eagle control in the context of fox protection, pig eradication, cervid hunts, and the costs involved, it is critically important to have everyone involved and sharing a common set of explicit principles. Ensure that methods for recording costs, degrees of effort, and success of each capture technique tested are included and that a mechanism for timely communications among critical parties exists.

Recommendation 2: Ensure that the plan has the flexibility to adapt to new information and changing conditions: Evaluate all known means of capturing golden eagles, or suppressing their ability to prey on foxes, as soon as possible. Prioritize timing and degree of effort by estimating the likelihood of success. Although it is important to test capture methods in such a way that reliable and quantitative comparisons among them may be made, it is equally important to quickly adopt techniques that are most successful. This means that communications between capture teams and island managers must take place frequently and openly to allow for adaptive management as new information is acquired. Continue to seek additional capture techniques that have been used successfully elsewhere; the RCG will assist in this effort.

Recommendation 3: Maximize all opportunities to locate eagles whenever any field activities are undertaken.

Recommendation 4: Minimize the availability of food resources for golden eagles. The minimization of food resources is important both to inhibit successful establishment of territories and subsequent reproduction and to direct eagles toward capture baits. Carrion (pigs on Santa Cruz Island and deer and elk—including gut piles—on Santa Rosa Island) should be made unavailable to eagles by removal or covering. Some form of monitoring will probably be needed to determine the most efficient means of eliminating these carrion food sources. We recognize that these actions may direct more predation pressure toward wild foxes, particularly on Santa Cruz Island. However, we repeat that long-term success of the island fox recovery depends upon eliminating golden eagles from the northern Channel Islands.